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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Cheng-Hwa Liu

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EXAMINER

PARK, GEORGE M

ART UNIT

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3623

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,183	Applicant(s) LIU ET AL.	
	Examiner GEORGE PARK	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/29/2003 and 8/6/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 1, 3-7, 9-13, 15-19 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al. (U.S. Pub No. 2002/0188499 A1).

Regarding to claim 1, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses a computer implemented method of dynamic customer demand forecasting (paragraph [0002], lines 1-2), comprising using a computer (i.e. external system/web-client, see fig. 1b) to perform the steps of: inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3); accumulating forecasted demand (paragraph [0030], lines

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7-10), selecting a highest hit rate from the forecast hit rate; and designating the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7). However, Jenkins et al does not explicitly disclose calculating at least one forecast hit rate, each of which corresponds to a forecast rule. It is common knowledge in the prior art to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the method of Jenkins et al. to include to feature of calculating at least one forecast hit rate (i.e. orders), each of which corresponds to a forecast rule. The motivation for doing so would have been to adjust/modify the forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claim 7, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses an apparatus (i.e. machine/server) of dynamic customer demand forecasting (see fig. 1a), comprising: inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3); accumulating forecasted demand (paragraph [0030], lines 7-10), accumulating forecasted demand (paragraph [0030], lines 7-10), selecting a highest hit rate from the forecast hit rate; and designating the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7). However Jenkins et al. does not explicitly disclose an input module, a calculation module, coupled to the input module, calculating at least one forecast hit rate, each of which corresponds to a forecast rule; a selection module, coupled to the calculation module, and a designation module, coupled to the selection module. It is common knowledge in the prior art for the apparatus of Jenkins et al. to include various modules (i.e. input module, calculation module, selection module, designation module,

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etc.) and to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the apparatus of Jenkins et al. to include to feature of an input module, a calculation module, coupled to the input module, calculating at least one forecast hit rate, each of which corresponds to a forecast rule; a selection module, coupled to the calculation module, and a designation module, coupled to the selection module. The motivation for doing so would have been to separate the implementation of performing a specific function of the apparatus in order to adjust/modify the forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claim 13, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses a storage medium (i.e. external system/server, see fig. 1b) for storing a computer program providing a method of dynamic customer demand forecasting (paragraph [0002], lines 1-2), the method comprising the steps of: inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3); accumulating forecasted demand (paragraph [0030], lines 7-10); selecting a highest hit rate from the forecast hit rate; and designating the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7). However, Jenkins et al does not explicitly disclose calculating at least one forecast hit rate, each of which corresponds to a forecast rule. It is common knowledge in the prior art to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the storage medium of Jenkins et al. to include to feature of calculating at least one forecast hit

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rate (i.e. orders), each of which corresponds to a forecast rule. The motivation for doing so would have been to adjust/modify the forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claim 19, Jenkins et al. discloses the invention substantially as claimed. Jenkins discloses a system of dynamic customer demand forecasting (paragraph [0002], lines 1-2), comprising: an operation computer (i.e. external system/web client) (paragraph [0057], lines 1-5, see fig. 1b), inputting at least one forecast rule (paragraph [0028], lines 1-4, paragraph [0029], lines 1-3), accumulating forecasted demand (paragraph [0030], lines 7-10), selecting a highest hit rate from the forecast hit rate, and designating the forecast rule corresponding to the highest hit rate as a target rule (paragraph [0034], lines 1-3, paragraph [0037], lines 1-7); and at least one database, coupled to the operation computer, storing the forecast rule, the forecast hit rate, and the target rule (i.e. information for operation) (paragraph [0019], lines 1-3, paragraph [0028], lines 1-6). However, Jenkins et al does not explicitly disclose calculating at least one forecast hit rate, each of which corresponds to a forecast rule. It is common knowledge in the prior art to calculate (i.e. accumulate) a forecast hit rate (i.e. orders) corresponding to a forecast rule when accumulating forecasted demand. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the system of Jenkins et al. to include to feature of calculating at least one forecast hit rate (i.e. orders), each of which corresponds to a forecast rule. The motivation for doing so would have been to adjust/modify the forecasted demand by selecting the highest hit rate as the target rule.

Regarding to claims 3, 9, 15 and 21, Jenkins et al. discloses wherein the forecast rule comprises a forecast base rule (i.e. forecast for the period) (paragraph [0029], lines 1-3) and at least one customer defined rule (i.e. input by customer orders) (paragraph [0031], lines 1-2).

Regarding to claims 4, 10, 16 and 22 Jenkins et al. discloses integrating (i.e. supplement) the forecast base rule and the customer defined rule into the forecast rule (paragraph [0031], lines 1-2 and 6-8).

Regarding to claims 5, 11, 17 and 23, Jenkins et al. discloses the invention substantially as claimed. Jenkins et al. discloses prorating the forecast by demand to date (paragraph [0030], lines 1-3) and setting the need date on which the first demand occurs (i.e. date of the first order) (paragraph [0048], lines 5-6). However, Jenkins et al. does not explicitly disclose wherein the forecast base rule is produced according to the most current order. It is common knowledge in the prior art to produce the forecast base rule according to the most current order when prorating the forecast by demand to date. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the computer implemented method, apparatus, storage medium and system of Jenkins et al. to include the feature of wherein the forecast base rule is produced according to the most current order. The motivation for doing so would have been to dynamically forecast demand and efficiently develop delivery capabilities of customer orders based on the most current orders.

Regarding to claims 6, 12, 18 and 24, Jenkins et al. discloses wherein the forecast hit rate is calculated according to orders (i.e. customer orders) (paragraph [0031], lines 1-2 and 6-8, paragraph [0034], lines 1-3, paragraph [0037], lines 1-7).

4. Claim 2, 8, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al. (U.S. Pub No. 2002/0188499 A1) in view of Borders et al. (U.S. Pat. No. 7,139,721 B2).

Regarding to claims 2, 8, 14 and 20, Jenkins et al. discloses the invention substantially as claimed. However, Jenkins et al. does not disclose providing the target rule to a capacity allocation model for capacity allocation. Borders et al. discloses providing customer order data (i.e. target rule) to determine an actual capacity allocation distribution. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the computer implemented method, apparatus, storage medium and system of Jenkins et al. with the feature of providing the target rule to a capacity allocation model for capacity allocation as taught by Borders et al., as both Jenkins et al. and Borders et al. are directed to a computer implemented method, apparatus, storage medium and system of dynamic customer demand forecasting. The motivation for doing so would have been to efficiently develop delivery capabilities of customer orders.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gleditsch et al. (U.S. Pat. No. 6,415,195 B1) discloses a system and method of scheduling demand. King et al. (U.S. Pub. No. 2003/0110104 A1) discloses an inventory management system. Lin et al. (U.S. Pub. No. 2003/0036946 A1) discloses a system and method with capacity and material target forecast used in supply chain management.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE PARK whose telephone number is (571)270-3547.

The examiner can normally be reached on Monday - Friday (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GP

3/5/08

/Jonathan G. Sterrett/
Primary Examiner, Art Unit 3623